

REMARKS

In view of the foregoing amendments and the following remarks, favorable reconsideration of the outstanding office action is respectfully requested. Claims 1-21 are cancelled. New claims 21-36 are submitted.

1. §102 Rejection

The Examiner rejects claims 1-3, 7, 8, 11 and 12 as being anticipated under 35 U.S.C. §102 (e) by U.S. Pat. No. 6,641,879 (Matsuura *et al.*). In particular, the examiner cites Example 13 in the reference, which discusses incorporating PMMA particles into a dilute cross-linked acrylic emulsion. First, the examiner reasons that since the particles are from a monomer, which has a vinyl group, they are taken as being functionalized particles (Our Spec. p. 8, lines 20-30), and being cross-linked to the resin inner layer as a result of being present in the layer when vulcanized.

To be anticipatory under 35 U.S.C. §102, a patent reference must “describe” every element recited in the claims at hand. The Matsuura '879 patent neither teaches nor mentions that the particles are covalently bonded to the material as Applicant has claimed. The Matsuura '879 patent discloses preparing an acrylic resin emulsion that contains a cross-linking agent (i.e., zinc white) and PMMA particles. The PMMA particles are merely mechanically embedded as a filler in the emulsion coating, without any teaching or suggestion that the particles are chemically bound to the material matrix structure. The particles are carried or held in the material merely by physical entrapment. The cross-linking agent does nothing to secure the particles, such as creating chemical bonds between the particles and the material substrate. Rather, the cross-linking agent is added to the acrylic resin emulsion as a base emulsion of the interior surface treating agent to improve the adhesion between a layer that is formed by the interior surface treating agent and the acrylic resin glove substrate (Col. 6, lines 29-33; Col. 9, lines 1-7). In a glove made according to Matsuura's description, the PMMA beads will tend to flake and fall off the surface of a glove once the glove material is stretched during donning, an undesirable trait, to be avoided in Applicant's invention, and a concept that has been

difficult to successfully put into practice. The beads used in Applicant's invention do not shed because they are chemically bonded to the coating material and effectively solves the problem associated with Matsuura's concept. Furthermore, as described in Applicant's specification (Specification, pp. 9, lines 9-32, to 10, lines 1-9.), PMMA requires further surface modification, which Matsuura does not teach. For PMMA to have the requisite surface functional groups to form covalent bonds, the material is subject to transesterification or other oxidative processes.

To anticipate the present invention, the Matsuura reference must disclose each and every claimed element. Since the reference does not disclose the limitation for a donning surface with a textured topography with beads that are covalently bonded to the material.

2. §103 Rejection

The Examiner rejects claims 4-6, 9, 10, 13-15, and 20-21, under 35 U.S.C. §103 (a) as being unpatentable over the Matsuura '879 patent. The Examiner alleges that it would have been obvious for one of skill to select acrylic acid resin and a methyl-polymethacrylate (PMMA) particle from the listed options of Matsuura.

First, the Matsuura '879 patent standing alone can not justify a *prima facie* case of obviousness since it neither discloses nor suggests all of the claimed elements. See, MPEP §2143 et seq., §2143.03 (All claim limitations must be taught or suggested). All of the pending claims require that beads are covalently bonded to the material. Applicant submits that the Examiner has misread the reference. The acrylic and methacrylic acids as monomers for the acrylic resin (col. 6, lines 1-5) are not covalently bond to the underlying material substrate or layer. Further as explain in the foregoing section, for Matsuura's PMMA, to be cable to create a covalent bond, the surface chemistry of the particle needs to be chemically modified, a process which the reference does not disclose or suggest. The examiner provides no showing that one of ordinary skill in the art by merely reading the Matsuura reference alone, would be inclined to modify the PMMA particle surface to create reaction favored functional groups, as Applicant has detailed. For the examiner to suggest that, one can take PMMA without more and copolymerize it into the appropriate elastomeric substrate material or hydrogel coating prior to

application to the glove is to use Applicant's own disclosure as demonstration of obviousness.

A simple PMMA particle does not have the requisite reactive surface functional groups, which must be modified to generate a hydroxyl-modified surface. In Applicant's invention, the surface chemistry of the polymeric or inorganic bead is converted to a surface that has, in one instance, an acrylate (vinyl) functionality. The steps are to first convert to a hydroxyl surface. These hydroxyl groups are then reacted with another molecule which has vinyl groups. Examples are 2-isocyanatoethyl methacrylate and glycidyl methacrylate (page 10). A functionalized bead is then blended in the with hydrogel monomers (which also contain a carbon-carbon double bonds) for copolymerization into the hydrogel structure. The carbon-carbon double bond on the functionalized bead is opened during the free radical polymerization with the hydrogel monomers to result in a carbon-carbon covalent chemical bond between the bead and the hydrogel coating. This results in the beads being chemically covalently bonded to the hydrogel coating. This will prevent it from shedding off when the glove is stretched. A person of ordinary skill will understand the the two process systems are very distinct and different from each other. Hence, the person of ordinary skill will not deem the present invention obvious.

The Examiner further rejects claims 16-19, under 35 U.S.C. §103 (a) as being unpatentable over the Matsuura '879 reference in further view of U.S. Pat. No. 6,303,514 (Weikel *et al.*). The Examiner believes that it would have been obvious to a person of ordinary skill in the art to apply a lubricating layer on top of a functionalized particle layer, as the present claimed in the invention in view of Matsuura in combination with Weikel which discloses a lubricant layer. Because, the Matsuura '879 reference is distinguishable as teaching something different from the present invention, and since the Examiner has provided no teaching or motivation to suggest that two references should logically be combined, when the reference is distinguishable, Applicant respectfully submits that the combination is unwarranted and does not make Applicant's invention obvious.

3. Conclusion

For the foregoing reasons, Applicant respectfully submits that all of the presently presented claims are in condition for allowance. Applicant believes that a three-month (3) extension of time is required to make the present Response is timely, but should Applicant be in error, Applicant respectfully requests the Office grant such time pursuant to 37 C.F.R. 1.136(a) as necessary to make this response timely, and hereby authorizes the Office to charge any necessary fee or surcharge with respect to time extension to the Kimberly-Clark Worldwide, Inc. deposit account number 11-0875. Please direct any questions or comments to Vincent T. Kung at: tel. 770-587-8606.

Respectfully submitted,

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By



Vincent T. Kung

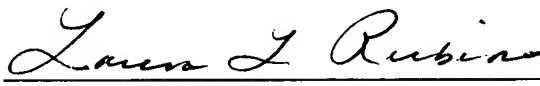
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CERTIFICATE OF MAILING

I, Laura L. Rubino, hereby certify that on February 8, 2005 this document is being deposited with the United States Postal Service as first-class mail, postage prepaid, in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

By



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